

FIGURE 1

```

graph TD
    M1((M1)) --- D((D))
    M1 --- D1((D1))
    M1 --- D2((D2))
    M1 --- D3((D3))
    M1 --- D4((D4))
    D --- Gn["(G)n"]
    D1 --- G1n["(G1)n"]
    D2 --- G2n["(G2)n"]
    D3 --- G3n["(G3)n"]
    D4 --- G4n["(G4)n"]
  
```

FIGURE 2

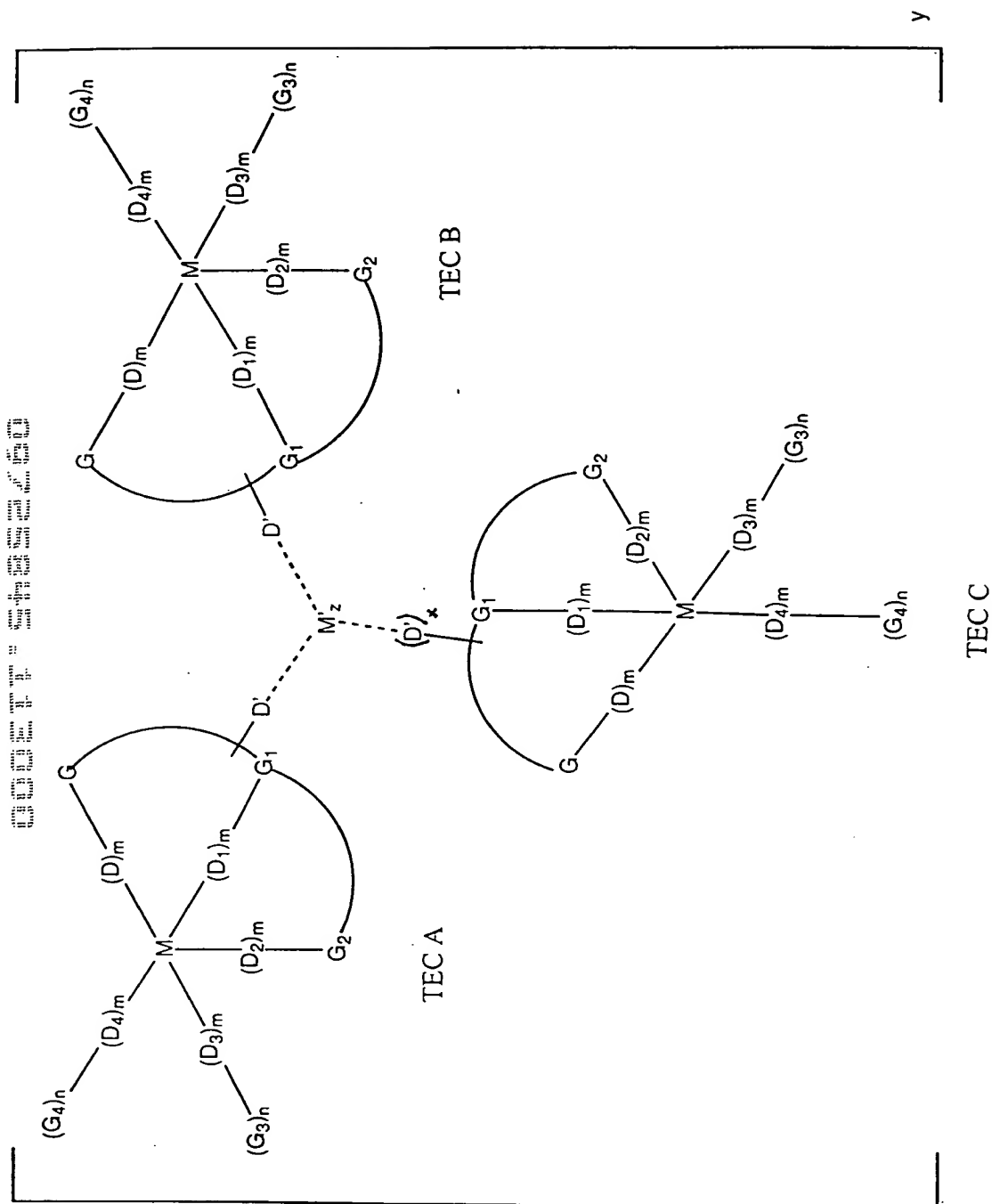
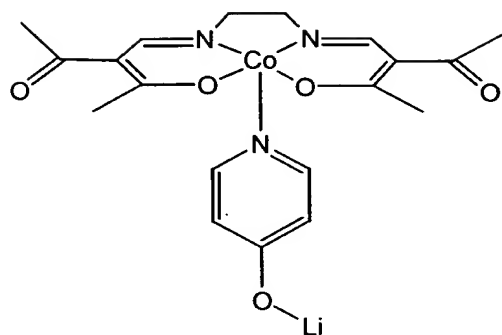
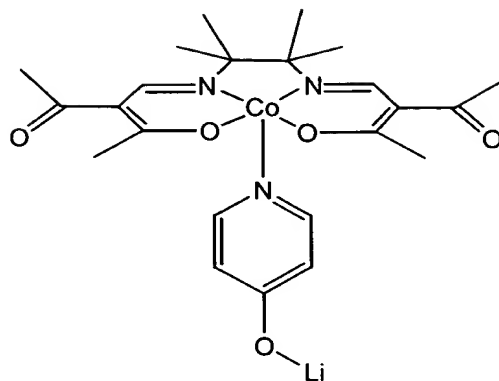


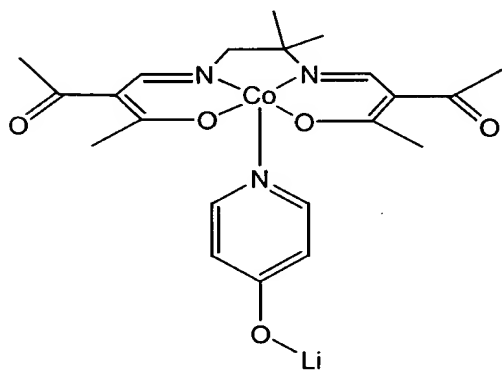
FIGURE 3



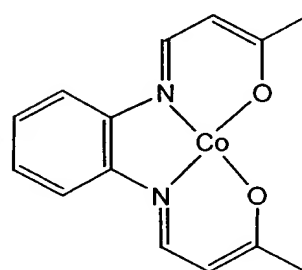
Co{Me<sub>2</sub>Ac<sub>2</sub>H<sub>2</sub>malen}(4-PyOLi)



Co{Me<sub>2</sub>Ac<sub>2</sub>H<sub>2</sub>maltmen}(4-PyOLi)



Co{Me<sub>2</sub>Ac<sub>2</sub>H<sub>2</sub>maldmen}(4-PyOLi)



Co{Me<sub>2</sub>H<sub>2</sub>H<sub>2</sub>malophen}

Figure 4

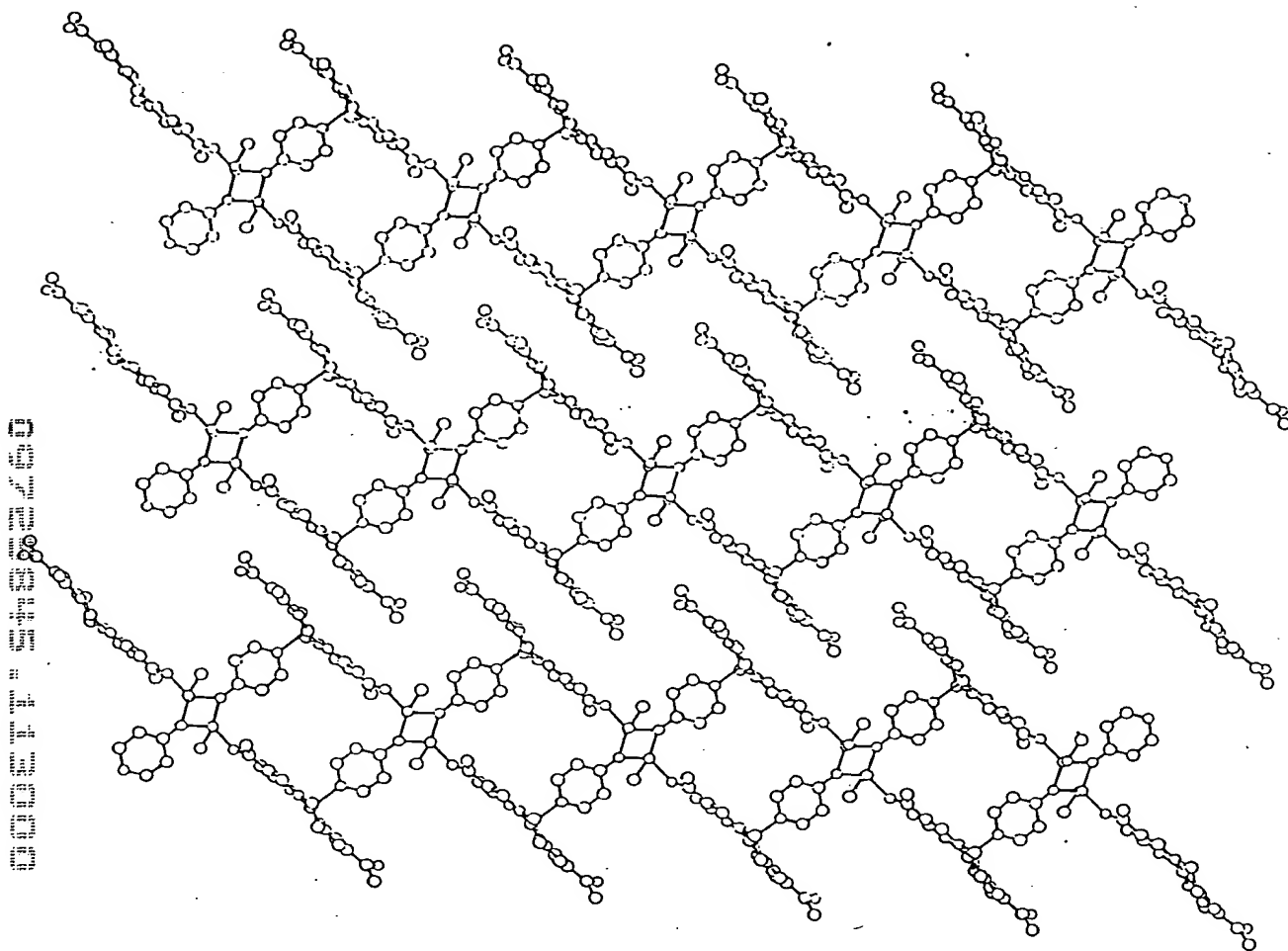


FIGURE 5 CRYSTAL STRUCTURE OF  $\text{Co}(\text{Me Ac H malen})_2(4\text{-PyOLi})_2(\text{MeOH})_2$

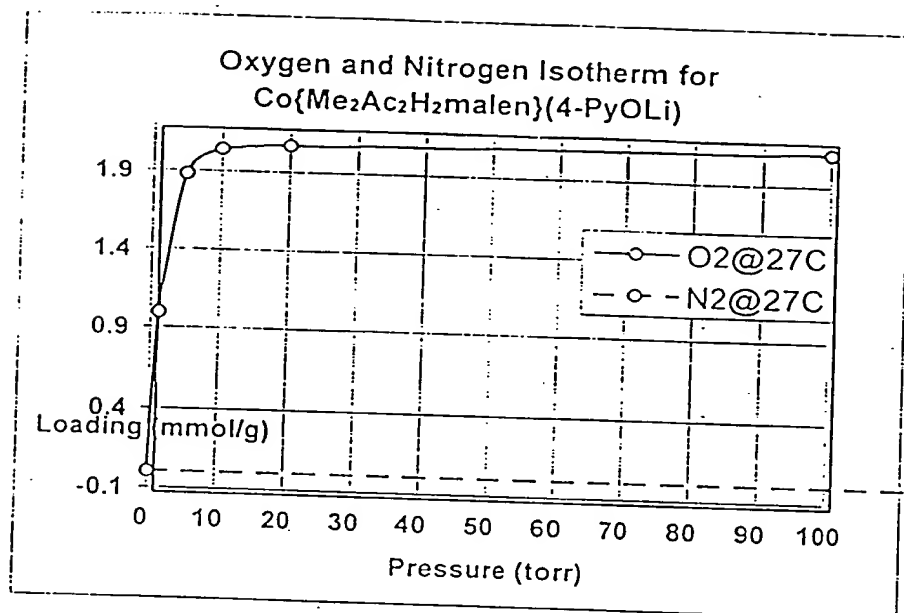


FIGURE 6 OXYGEN AND NITROGEN ISOTHERMS FOR Co{Me<sub>2</sub>Ac<sub>2</sub>H<sub>2</sub>malen}(4-PyOLi)



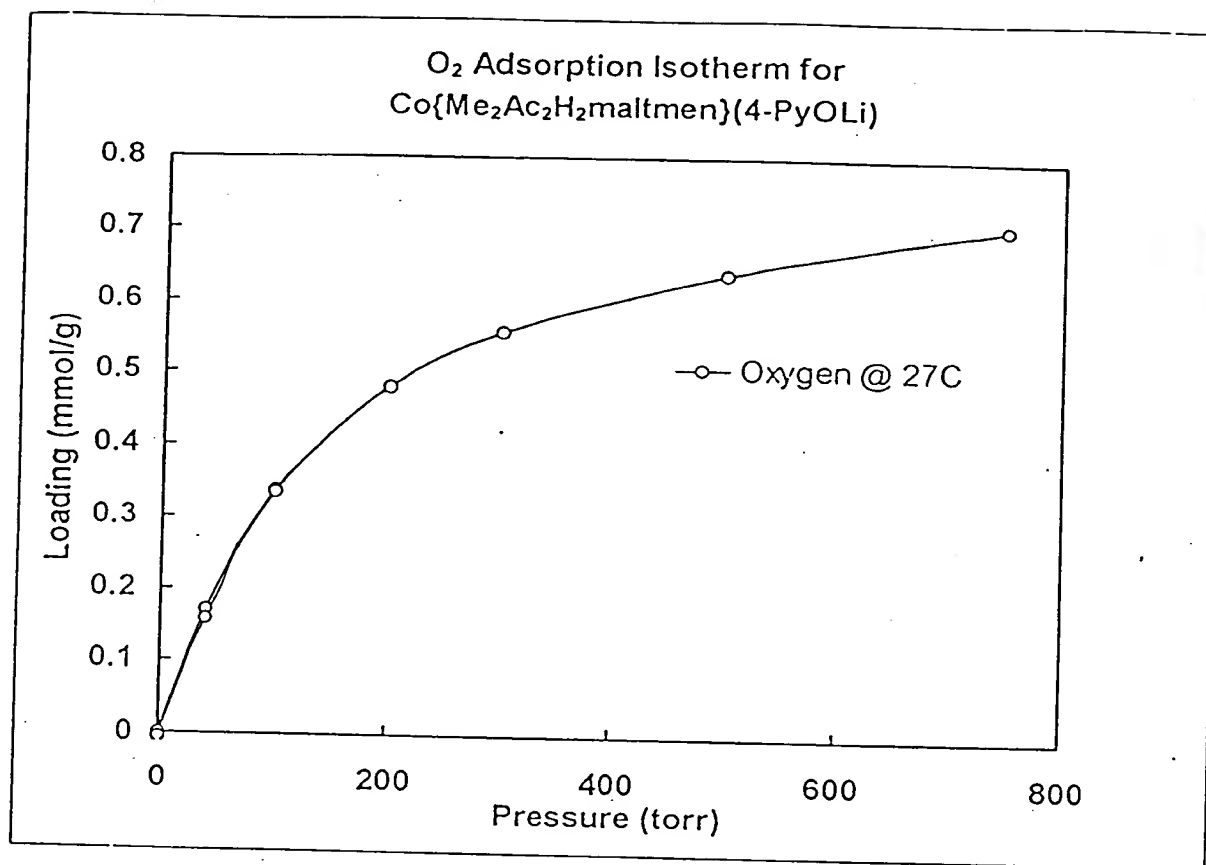


Figure 8 Oxygen Isotherm for Co{Me<sub>2</sub>Ac<sub>2</sub>H<sub>2</sub>maltmen}(4-PyOLi) at 27 °C



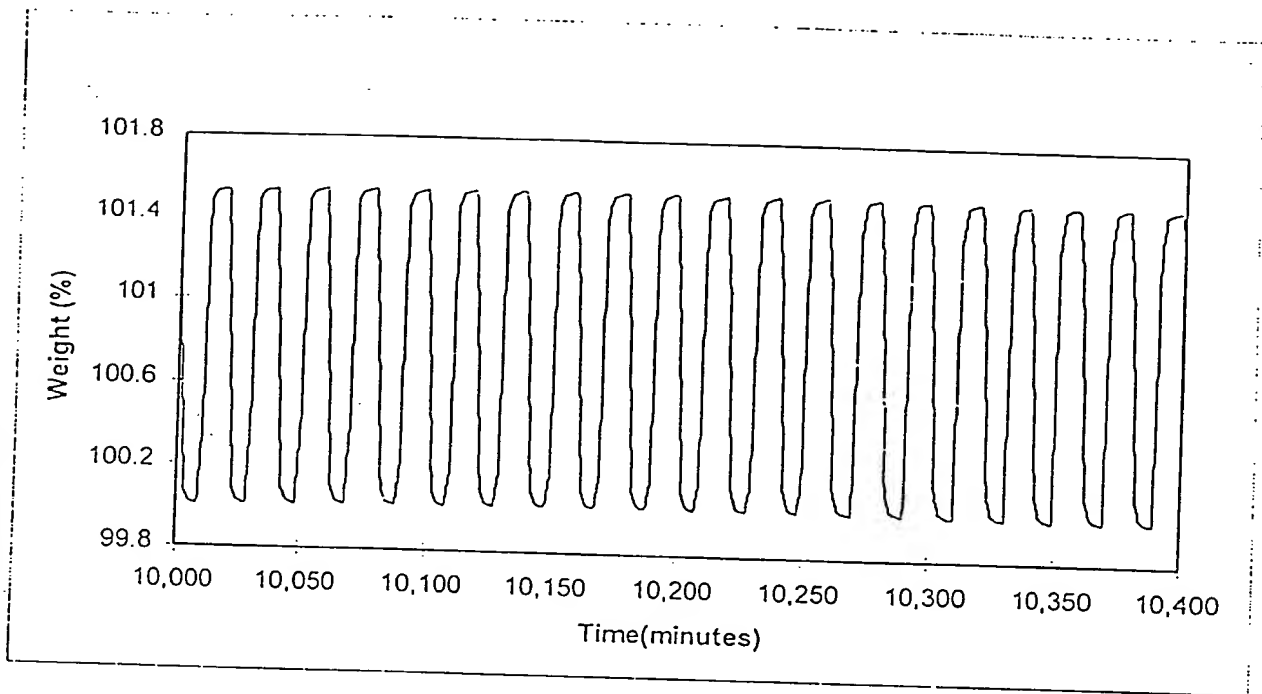


FIGURE 9

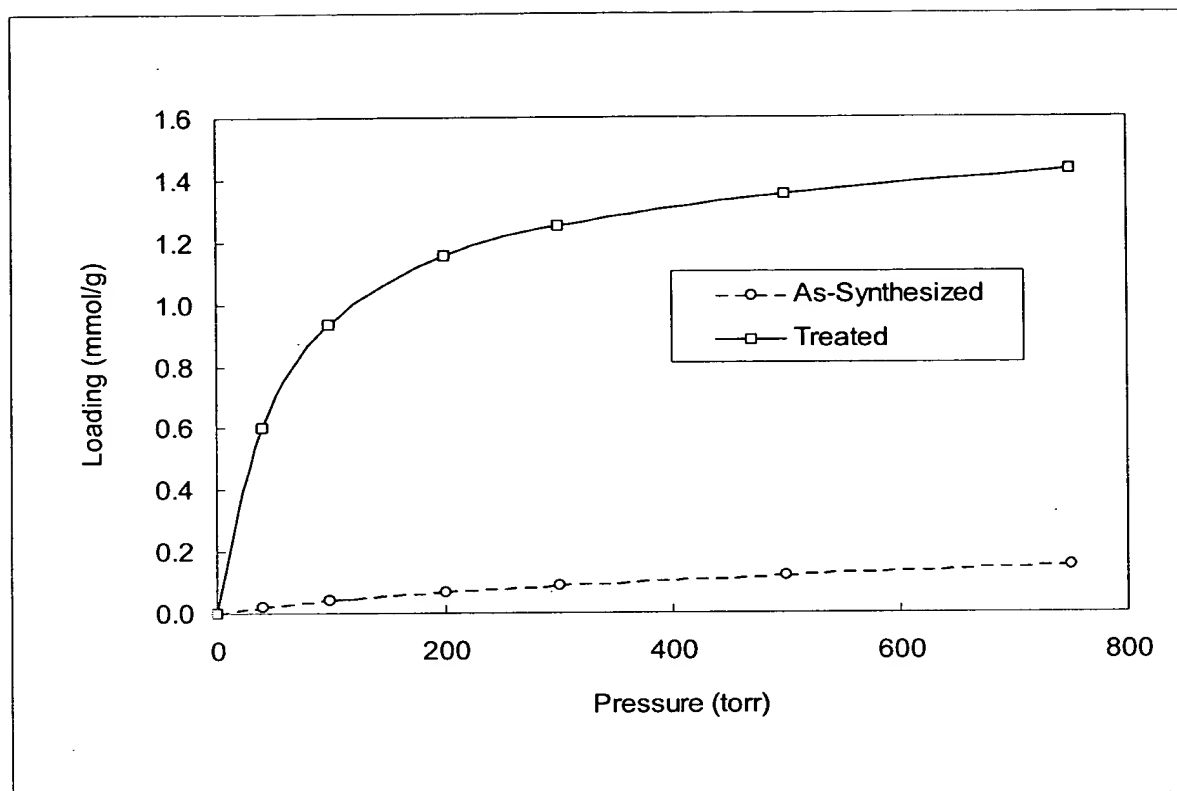


Figure 10. Oxygen Isotherms for As-synthesized and Treated  $\text{Co}(\text{Me}_2\text{Ac}_2\text{H}_2\text{maltmen})(4\text{-PyOLi})$

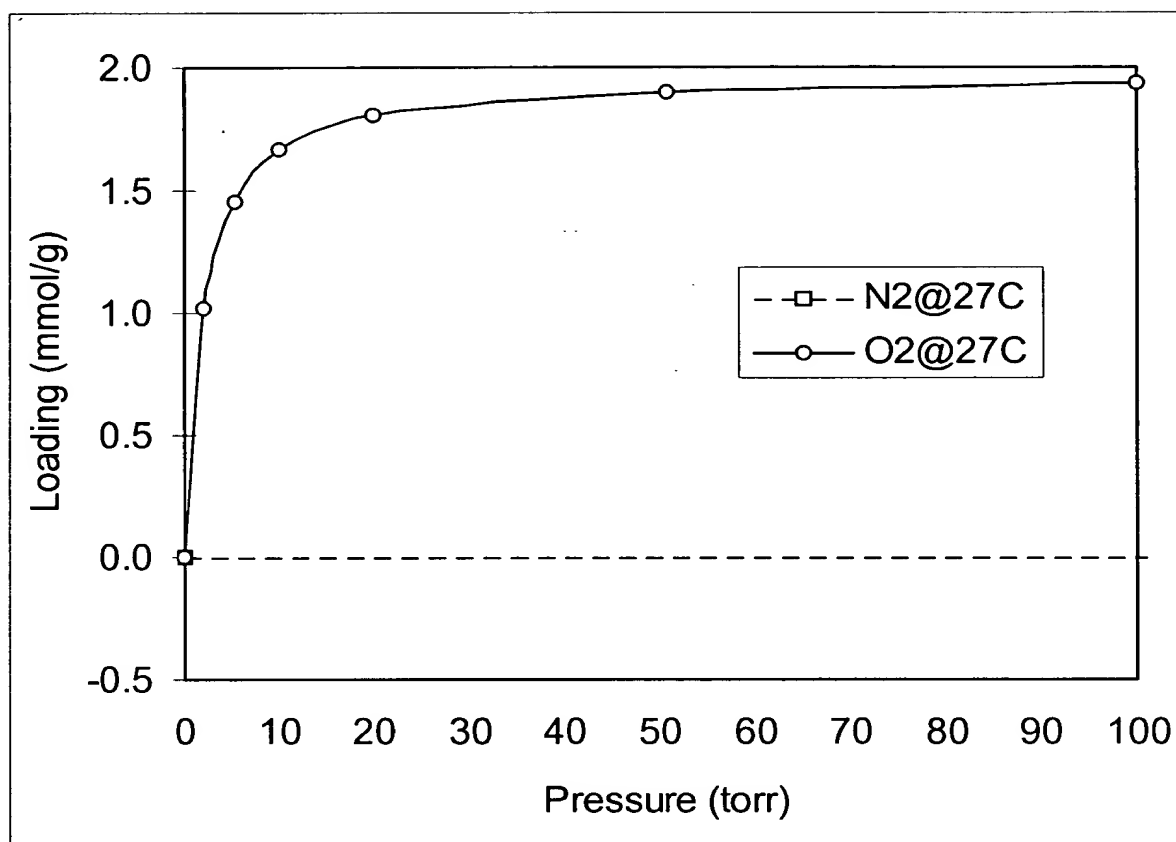


Figure 11. Oxygen and Nitrogen Isotherms for  
 $\text{Co}(\text{Me}_2\text{Ac}_2\text{H}_2\text{maldmen})(4\text{-PyOLi})$